La première bande, sensiblement verticale, va jusqu'au profil ventral en passant par l'insertion des pectorales. Les suivantes, légèrement obliques vers l'arrière sur le tiers dorsal, présentent leur plus grande largeur au niveau de la ligne latérale ; la deuxième se divise aux trois quarts de la hauteur en deux bandes fines qui atteignent le profil ventral et sont séparées par un intervalle clair; la troisième se termine à la base des trois épines anales; la quatrième, qui intéresse toute la hauteur du pédoncule caudal, se termine en arrière de la caudale chez le plus petit exemplaire (holotype), alors que chez le plus grand (paratype) elle se prolonge en avant en soulignant la base des 7 derniers rayons de l'anale. Dans les intervalles qui séparent les bandes sombres on note, comme chez *D. cervinus hottentotus*, d'étroites bandes sombres s'élevant à partir du profil ventral jusqu'au tiers de la hauteur : deux dans l'intervalle qui sépare les bandes sombres 1 et 2; une dans l'intervalle qui sépare les bandes sombres 2 et 3. Bien que nous ne disposions que de deux exemplaires, ce qui interdit d'estimer la variabilité des caractères morphologiques au sein d'une population, nous pensons que les exemplaires capturés en mer d'Arabie représentent une sous-espèce nouvelle, *Diplodus cervinus omanensis*, isolée géographiquement de *Diplodus cervinus hottentotus* Smith, 1849, sous-espèce la plus voisine.

Nous désignons comme holotype de la nouvelle sous-espèce l'exemplaire MNHN 1984-358, de LS 210 mm, et comme paratype l'exemplaire MNHN 1984-359, de LS 270 mm. Leurs mensurations, indiquées dans l'ordre holotype, paratype, sont les suivantes: longueur totale : 275, 340 mm; hauteur du corps : 103, 134 mm; longueur de la tête : 65, 89 mm ; longueur prédorsale (prise entre les deux verticales issues du bord antérieur du museau et de l'origine de la nageoire dorsale) : 73, 100 mm; longueur préanale : 149, 193 mm; longueur de la pelvienne : 48,8, 67,2 mm; diamètre de l'œil 18, 20,5 mm; distance préorbitaire : 27, 37 mm; distance sous-orbitaire : 16, 22,5 mm; distance interorbitaire : 24, 32,5 mm.

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ABOUT THE TAXONOMIC STATUS OF *SCORPAENA GAILLARDAE* ROUX, 1954 (OSTEICHTHYES, SCORPAENIDAE).

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ABSTRACT. – Some considerations concerning the external morphology of *S. gaillardae* Roux, 1954, deal with the possibility to be a valid species instead of a synonym of *S. stephanica* Cadenat, 1943.

RÉSUMÉ. – Quelques considérations sur la morphologie externe de *S. gaillardae* Roux, 1954 permettent d'envisager la possibilité de sa validité spécifique et non d'être considérée comme synonyme de *S. stephanica* Cadenat, 1943.

During a bottom trawling survey carried out in 1977 over the Western Mediterranean shelf (Suau, 1981) two scorpionfish specimens belonging to the species *Scorpaena stephanica* Cadenat, 1943 were identified. This was the first record of this species in Europe (Allue *et al.*, 1981).

During the survey of the literature required to establish identification, some new and not particularly well defined considerations arose concerning the current status of *Scorpaena gaillardae* Roux, 1954. This is the subject of the present note.

Roux (1954) made the first report of the species *S. gaillardae* from some specimens probably caught near Pointe Noire (Congo). The general features of this new species were apparently similar to those reported by Cadenat (1943) for the species *S. stephanica*, with at least the following exceptions.

Dorsal fin 9 soft rays, instead of 10 as in *S. stephanica*; a longer pectoral fin reaching a vertical line drawn through the second ray of the anal fin; 8 + 3 gill-rakers on the lower edge of the first branchial arch; a permanent spot on the upper part of the dorsal fin between the 6th and the 8th spiny rays.

On the other hand, Poll (1959) reported *S. stephanica* in Angolan waters. His description is in agreement with the one furnished by Cadenat, except that : the number of gill-rakers along the lower edge of the first branchial arch was 8, with the observation that « Cadenat reports only six for this species »; on the figure provided by Poll (fig. 68, page 189) for one of the specimens assumed to belong to *S. stephanica*, the pectoral fin clearly reaches the vertical line through the 2nd ray of the anal fin.

Two remarks can be made in this regard :

– Cadenat's paper states that « the four anterior gill-rakers are rudimentary; and the remaining six are short, spiny and bulky along the lower edge of the branchial arch », that makes 10 gill-rakers instead of 8, as Poll reported.

– The two exceptions indicated above for the specimens of Poll identified as *S. stephanica* are in accordance with the description of *S. gaillardae* given by Roux.

Moreover, Eschmeyer (1969) in his revision of the Atlantic scorpionfishes, gave *S. gaillardae* as a synonym for *S. stephanica* Cadenat, 1945. The authors have assumed that this date may have been a printing error which was also repeated in the References List of his paper, as all the data cited from Cadenat's 1945 coincide with the information in his 1943 paper. In addition, Eschmeyer overlooked the following items in his description :

- the variation in the dorsal fin ray count; Cadenat reports 10 while he reports only 9 (XII + 9), stating specifically that in all his counts there were 9 soft rays;

- the typical longer pectoral fin (in this case reaching the vertical line through the first anal ray).

Depending on how these two points are interpreted, the *S. stephanica* specimens observed by Eschmeyer are either similar to *S. gaillardae* or else clearly differentated from this latter species.

In an earlier paper, Allue *et al.*, (1981) presented the results of a comparison of specimens of *S. stephanica* from the Mediterranean with others caught off Senegal and kindly furnished by Dr. B. Seret (ORSTOM, Dakar). The characteristics of all the specimens coincided and also matched Cadenat's 1943 description, including 10 gill-rakers and the 'shorter' pectoral fin. On that occasion the authors accepted Poll and Eschmeyer's descriptions together with the systematic position they gave.

From the foregoing it can be concluded that there is a need for a complete review based on additional material to establish the final status of *S. gaillardae*. In any event, the hypotheses to be tested will lead either to acceptance of significant variation in certain morphometric features of *S. stephanica*, in which case *S. gaillardae* would be a correct synonym, or else to acceptance of *S. gaillardae* as truly independent species, in which case it is likely that many records of *S. stephanica* may have to be revised and reidentified.

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MERISTIC COMPARISON OF *LIZA ABU* FROM BASRAH, IRAQ AND KARKHAH RIVER, ARABISTAN, IRAN.

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The mullet *Liza abu* (Heckel) is one of the commonest and best known of the Mesopotamia Mugillid fishes. It is found in most of the waters of Iraq and neighbouring countries (Kahsbauer, 1963; Coad, 1979) down to depths of about one meter. It is most abundant during summer time (May-September) and considerable quantities are taken by commercial and amateur fishermen.

Differences in meristic characters have been the basis for separating populations of different fish species (Seymour, 1959; Anthony, 1968). Meristic variation between populations of fishes may be influenced by genetic or environmental factors, or both (Bailey and Gosline, 1955). Different workers attributed the difference in meristic characters to environmental factors such as light, temperature, and dissolved oxygen during the period from fertilization to hatching (Wallace, 1973; Kwain, 1975).

Number of vertebrae and dorsal fin-ray count were compared among two stocks of mullets (*L. abu*) found in Basrah, Iraq and Karkhah river, Arabistan, Iran to determine if stocks would be separated by these characters.

Materials and Methods. One hundred fishes of *L. abu* were obtained from Shatt Al-Arab river at Basrah, Iraq and seventy four fishes were obtained from Karkhah river, Arabistan, Iran. Different meristic characters viz. number of vertebrae, dorsal, pectoral and anal fin ray count were counted (Table I). Variability in the count of some meristic characters between the two stocks was found to be much less than in the dorsal fin-rays and number of vertebrae. Consequently only the dorsal fin-rays and number of vertebrae were discussed. The data were analysed by using the least significant difference (LSD) of Snedecor and Cochran (1967).

Results and Discussion. Whatever the mechanism controlling meristic variation in fishes, large meristic differences between populations are unlikely to develop without some measure of isolation between the populations, as continual interchange of individuals will tend to prevent the development of genetic differences. However, meristic characters may differ on account of environmental differences during early development (Taning, 1952). Natural selection will act on such characters and, when isolation is complete, genetic differences between the populations may, in time, develop.

The two populations under consideration were significantly different from each other in numbers of vertebrae and dorsal fin-rays count (Fig. 1, Table I). In certain instances significant differences were found in meristic counts between fishes from neighbouring streams and among streams within large geographical areas (Nicols, 1966). Whether the cause of these differences was primarily genetic or was environmental variation under which the fish developed, or a combination of both, would not affect the findings. Physical and chemical data on the environment at spawning time were not available, so the relation between differences or shifts in meristic counts between two separate rivers and environmental factors was not known.

The differences in the number of vertebrae and dorsal fin-rays between the two populations might throw a light on the problem of race found in the species *L. abu*. It was reported by Svetovidov (1949) and Coad (1979) that *L. abu zarudnyi* is a sub-species found in the Arabistan rivers system, and the present results may give an indication for the sub-

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